

FLOOD CONTROL ADVISORY BOARD
MINUTES
March 27, 2002

Chairman Patel called the monthly meeting of the Flood Control Advisory Board to order at 2:00 p.m. on Wednesday, March 27, 2002.

Board Members Present: Hemant Patel, Chairman; Scott Ward, Vice Chair; Melvin Martin; Tom Callow, Ex Officio; Paul Cherrington, Ex Officio.

Board Members Absent: Shirley Long, Secretary; Mike Saager.

Staff Members Present: Michael S. Ellegood, Chief Engineer & General Manager; Julie Lemmon, General Counsel; Dick Perreault, CIP/Policy Branch Manager; Tim Phillips, Project Manager; Kelli Sertich, Project Manager; Steve Waters, Flood Warning Branch Manager; Ed Raleigh, Engineering Division Manager; Tim Murphy, Flood Delineation Branch Manager; David Degerness, Senior Hydrologist; Kathy Smith, Clerk of the FCAB; Lorena Mosso, Administrative Coordinator.

Guests Present: Kofi Awumah, Michael Baker; Mike Brilz, Sunbelt Holdings; Pat Ellison, Stantec Consulting; Jeannette Fish, MCFB; Teri George, David Evans & Assoc.; Burke Lokey, Arcadis; Hasan Mushtaq, City of Phoenix; Mary Reece, BOR; Dan Sagramoso, Kimley-Horn; Sandy Story, City of Chandler; Jerry Zovne, Parsons.

1) RECOGNITION OF THE FCD EMPLOYEE OF THE QUARTER

Mike Ellegood announced the Employee of the Quarter and introduced David Degerness, Senior Hydrologist in the Engineering Division, as the Employee of the Quarter for the first quarter of 2002.

2) APPROVAL OF THE MINUTES OF THE MEETING OF FEBRUARY 27, 2002

ACTION: It was moved by Mr. Martin and seconded by Mr. Cherrington to approve the minutes as submitted. The motion carried unanimously.

3) LAVEEN AREA DRAINAGE MASTER PLAN

Mr. Ellegood mentioned that there are two action items the Board is being asked to adopt. The two Area Drainage Master Plans are very different in that one will cost a little more money on planning, but with no construction. The other ADMP does not have a lot spent on planning, but quite a bit is being recommended on construction. This is due to the two different problems that need to be solved.

Tim Phillips, Project Manager, explained that the projects are very different but the Resolutions are similar for both projects. In the Laveen project, it's in a very agriculturally dominated area, whereas North Peoria is largely undisturbed desert. The study area for Laveen is 14 square miles, whereas North Peoria is 73 square miles. The type of drainage flow in Laveen is sheet flow off of South Mountain, whereas in North Peoria the drainage is more concentrated in wash/channel flow. The landholdings are also quite a bit different. In Laveen there are many individual or residential-type landholdings and in North Peoria there are fewer multi-section landholdings.

Mr. Phillips presented Resolution FCD 2002R004 for the Laveen Area Drainage Master Plan as an action item to ask the Advisory Board to endorse and recommend to the Board of Directors to adopt the Master Plan as well as to ask the Board of Directors to recommend to the Board of Supervisors that they also adopt the Master Plan.

The purpose of the Master Plan was to quantify the flooding problems and develop flood control strategies. As part of that, the District wants to look for multi-use opportunities that can be done in concert with the Flood Control District remediation. The goal is to formulate the regional solutions, look at the watershed as a whole and define solutions that will provide public protection for the entire watershed. The solutions need to be cost effective, sensitive to the natural and cultural resources within the area, and sensitive to the neighborhood character.

The total price tag of the improvements on a conceptual level, keeping in mind that as each piece gets implemented over time the design will more define what the feature is, is right at \$20 million. The actual study cost was \$650,000.

Discussion:

Patel: As far as the \$20 million worth of improvements, where are they in our CIP?

Phillips: None of these features are in the five-year CIP.

Patel: So it would have to come back to this Board?

Phillips: The traditional method is, now that we have the master plan in place, that the project partners – in this case the City of Phoenix – would request the projects through the prioritization process to define those features that are priority to them. They get submitted during the summer time frame and are prioritized as part of the CIP Prioritization Process.

Patel: As far as the provisions of the Resolution that you are looking for approval, where the District can go out and start getting these features designed, we'll still get to see it?

Phillips: Absolutely. It simply gives us the authorization to go forward, but in order to implement any of the features, we'll have to have an IGA with our public partners and you will see that and have an opportunity to approve that IGA.

Patel: And it has to go through the CIP process?

Phillips: Absolutely.

Callow: Did you have any contact with our Planning Department on these detention basin sites?

Phillips: They were involved in the process from day one.

Callow: Ok. So they didn't object to the fact that many of these were on the intersection of two arterial streets?

Phillips: No.

Ward: I think if we are looking at costs, those are the most valuable pieces. I'm assuming that you are going to be carrying some water down these section line roads in a flood state. These corners are very valuable and I'd like you to revisit and see if those basins can be moved. If they are moved interior somewhere, they can be used more as active amenity areas as well as save cost in the high cost of section corners. Secondly, Laveen may very well be one of the highest areas of growth. It's an area that has just caught fire and the City of Phoenix is going to see tremendous, high-density development there. Is there any way we could establish a drainage improvement district and, much like you do a traffic or sewer study, say we are going to do a regional drainage study and take that cost and shed it off to the property owner? As each individual developer would come in, they would pay instead of the County or the City of Phoenix, and we've gone ahead and saved the developer thousands of dollars by developing a regional drainage area. We're going to work out all the bugs to make this regional drainage area work and the developer's contribution would be \$1,000 or \$2,000 an acre, or whatever the cost is, and help us offset some of this cost.

Ellegood: I think it's legal to do that. What I would do is visit with my client city and see if this approach is the one they want to see. This makes ultimate sense, it's in one political jurisdiction and it's easy to administer in that sense. I think that's a very good suggestion and one that we should discuss with the cities. I think it's an issue of precedent.

Patel: Are we talking about recouping the \$650,000 that's been spent on the study or to try and create a funding mechanism for the \$20 million worth of improvements?

Ward: I don't know if you can recoup the study. Tom, I think in your Planning Department, water & sewer is going to be inundated, as well as plat applications. In any area, if there was a drainage master plan already in place, it could help save dollars for on-site/off-site retention that developers would have to do and they could help carry the cost.

Callow: I can speak to some of that. That is the mechanism we're using to fund the Laveen Area Conveyance Channel. We placed an impact fee program down there where each home has to pay in. The dilemma we run into is you have to spread that impact fee over the entire benefit area and you don't collect the last dollar until the last home is built. You could be 60 years collecting the whole amount of money, and I don't know that a dollar 60 years from now does as much good as today. Since these are new projects, they are probably not in a current impact program, but we could look to add those to an impact program.

Ward: I think that's a great approach.

Patel: Yes, I think that would be great if we could use this as a pilot case and see how it may work.

Callow: On the Laveen Area Conveyance Channel, what we've had to do is go to our own Finance Department and asked to borrow \$6 million with a guarantee to pay them back within six years and the sixth year is a new bond program. So, if the revenues don't come in from the development during those five years, then this would be a project we'd have to put into our next bond program to get the revenues to pay off our own financing.

Patel: But you'd have the money right now to go forward with the improvements? The same thing could happen with the \$20 million if the development pressure is there.

Phillips: Let me say that what I did with Doug Frost and Company is that before we started this study, the City asked me if I had a feel for what the cost would be because the City was developing the impact fee structure for Laveen. So, I did give them some rough dollars, kind-of my best estimate based on channels and basins, so there is something in there. The real challenge concerns the timing of the funding. We need the infrastructure to be in place to provide the protection for the development that is occurring, but we don't get the money back until that development occurs. So, how do our partners and we come up with the up-front cash to build the facilities, knowing that there is a payback mechanism coming with that up-front cash.

Callow: Just as a side note, we did attempt one large area improvement district, actually it was the 48th Street Basin down at 48th and Pecos, and we just couldn't get that to work on an improvement district basis. We couldn't get all the interested parties to the table; they need to agree up front and sign off. You can't encumber their property through an improvement district.

Ward: You can't?

Callow: Not unless you have 51% buy-in.

Ward: So, unilaterally, you can't just institute an improvement district and go ahead and blanket encumber everybody?

Patel: The City can't, I'm not sure about the County.

Ellegood: No, I'm sure we can't either.

Ward: That is really too bad, that would be a great way of taking an area like this that is relatively infant in development. With sewer and water it can be done, right?

Callow: With sewer and water you can get a repayment agreement, you cannot burden the property, they have to pay you back in order to access your sewer and water system.

Ward: Through a buy-in fee?

Callow: Yes, and if they don't ever buy in, you don't get any money and even that lapses every ten years.

Lemmon: The Flood Control Statutes have a zone program, which is similar where you can actually pull out a zone and tax it with a second tax. But, you have to show that it benefits every parcel in the zone. This District has never exercised it because it's difficult to show the benefit to each piece of property when it's maybe some distance from a watercourse.

Ellegood: I picked up two things from Mr. Ward's comments. One of which was to take a look at pulling the basins back away from the section line. I just conferred briefly with Ms. Lemmon to see if this could be done after the study has been approved, and the answer is yes, it's an implementation detail. I think we should take your comment and go back to the City of Phoenix, because ultimately it's in their jurisdiction, and see what they feel about it. Meanwhile you can go ahead and approve the study if that's your will.

Martin: It's funny that you put it at 51st Avenue and Baseline on the west side when on the east side is the low property. The east side is always flooded.

Phillips: There are two aspects to that, one this is a conceptual plan, but two recognize that the flooding that you've seen out there has probably not been a 100-year event. During the 100-year event, it wouldn't matter if it's on the east side or the west side, it's going to fill that ditch up, seeking whatever the low spot is. The magnitude of events that we've seen vs. what the design is for the future 100-year conditions, whatever little swale that exists now and the flooding that occurs would be magnified quite a bit during the 100-year event.

Martin: I don't profess to having been out there 100 years, but I've been there 54 years, and I'll tell you one thing, you've got them basins in the wrong place. I think you're buying high dollar property when you don't need to be. You need an interior piece. You can buy a 10-acre interior piece there a lot cheaper than you can on that corner.

Ellegood: Let's look at it.

Cherrington: How much visibility do developers now have as to where you're looking for those, and are they developing things that will have to be undone when you go back?

Phillips: The difficulty we have in the master plan process is that as a developer comes in, we try to, as does the City, get this information as soon as possible to try and work it into their process. It might be that their interest in the basin on the corner doesn't work, but going interior to their site does work. The challenge is how we negotiate with them when we don't have the project approved and funded before the development starts. The only way to really insure that that parcel is open when we need it is to buy the parcel, that's the challenge of implementing the master plan.

Cherrington: I remember the other plan that stopped at 43rd Avenue. Why is the basin on 43rd and Dobbins, east of 43rd Avenue?

Phillips: Again, it could be on any of the four corners. There is water coming off of the southwest side of South Mountain that isn't picked up by the basins and features east of 43rd Avenue. That's why there is a basin in that particular location.

ACTION: It was moved by Mr. Cherrington and seconded by Mr. Ward (if Mel Martin is included as part of the next neighborhood discussion) to approve staff recommendations. The motion carried unanimously with the exception of Mr. Martin who abstained for cause.

Ms. Lemmon noted for the record that when a Board member abstains from voting, it is recorded as a no vote. If there were only four members present, it would take the remaining three members to vote unanimously to pass an item.

4) NORTH PEORIA AREA DRAINAGE MASTER PLAN

Kelli Sertich, Project Manager, presented Resolution FCD 2002R003 for the North Peoria Area Drainage Master Plan. The action requested was for the Advisory Board to endorse and recommend that the Board of Directors and Supervisors adopt this Resolution.

The study was requested by the City of Peoria. The purpose of the study was first of all to identify the flood and erosion hazards. Secondly, to develop policies and strategies that would lead into the Rules of Development. Third, to preserve the natural flood control of the floodplain and minimize any disturbance to the area. Finally, to incorporate multi-use opportunities in the watershed.

The preferred alternative was the non-structural solution, with an understanding that there are times when roads will cross through the floodplains as well as utility crossings. Staff recommended no infrastructure improvements; no Capital Improvement Projects will be recommended out of this study. There will be some regulatory and management costs, which will include implementation costs for review and inspection costs for compliance, and there will be a maintenance plan.

Discussion

Martin: What was the cost of that study?

Sertich: The cost of the study was approximately \$1.4 million. We received reimbursement from MCDOT and the City of Peoria, so the District's cost was about \$1.2 million.

Ward: This is a very beautiful area. I just want to say thanks, I love the study because of the lack of concrete that's proposed in the development. Is Peoria here and is Sunbelt here? I feel it would be interesting for them to come up and talk to us a little bit about their vision and how they work with this group.

Sertich: I don't believe a representative from the City of Peoria is here, but we do have a representative from Sunbelt Holdings. I'd like to invite Mike Brilz to come up and speak.

Mike Brilz, Sunbelt Holdings: We're pretty consistent. They're great washes – we want to keep them and use them as a resource to back water up in. Our philosophy is that post development flows at our outlets have to be equal to or less than pre-development flows. We want to keep the flexibility to manage this internally, which this study allows us to do. Your study is on a macro-scale; when a developer comes in, he's going to look a lot closer. Your study allows him to come in and basically take it as a baseline. What we've done is built on it, refined it, and resubmitted it and it's presently under review by the District. I think that they pretty much parallel development philosophies between what Kelli and her group did and what we were planning to do. There are

some management issues on how to handle flood control and maintenance. There is no right or wrong way to do it, but we want to look at it together and try to balance the regulatory and the private sector. Just allow the developer and the private landowners to come in and take a closer look at it because I think there is always the opportunity that they're going to take a better look at it than the scope of your study could do.

Patel: I'm very interested in the maintenance aspect and the guidelines that have been developed, especially the provisional maintenance district getting in. If you could, at a future meeting, share some more details on the maintenance district and how that works. Maybe it's something we should look for every time we're faced with a situation where a private entity is going to be handling maintenance and just make that part of our requirements to have something that has some funding mechanism.

ACTION: It was moved by Mr. Callow and seconded by Mr. Cherrington to approve staff recommendations. The motion carried unanimously.

5) FLOOD CONTROL DISTRICT ALERT SYSTEM

Steve Waters, Flood Warning Branch Manager, presented an update on the Flood Control District ALERT System.

Mr. Waters explained what the ALERT System is, gave some history of ALERT in Maricopa County, talked about the Local Flood Warning Systems in Maricopa County, and informed the Advisory Board members about how they can access this information through the District's web site.

ALERT stands for Automated Local Evaluation in Real Time. Data is processed at a site in the field, evaluated and sent to the District's office in real time. The District's ALERT system covers mostly the northern portion of Maricopa County with a few sensors in Yavapai and Pinal Counties.

The Flood Warning Branch objectives are to:

- ?? Provide technical support to the District's customers prior to, during and after flood emergencies.
- ?? Maintain an accurate and accessible historic database and develop value-added products from the data collected.
- ?? Support research related to flooding and flood damage.
- ?? Support local flood warning and environmental program.

The information that Mr. Waters provided can be found on the ALERT Web Page at <http://www.fcd.maricopa.gov>.

Discussion

Patel: The data that comes from the gauges, is that digital or analog?

Waters: It can be both. Temperature sensors and anemometers are analog sensors. The pre-set bucket is a digital sensor. There are two parts to the data that comes in. There's a unique ID for each sensor and then some integer data. Those come in to the database and are filed along with a time stamp under the proper ID. Then the computer makes the conversions to engineer units. If we have 50 counts at a rain gauge, it will convert that to inches for us in the computer.

Patel: Every time you change or buy a new batch of equipment, is there some programming involved as well?

Waters: Not really, because that ALERT Protocol Standard keeps them the same. We're still working with late 1980's technology. There are so many more things we can do now with data checking, air checking, etc. that we don't have.

ACTION: No action was required – for information and discussion only.

6) COMMENTS FROM THE CHIEF ENGINEER AND GENERAL MANAGER

Mike Ellegood informed the Advisory Board that recently Jim Perfrement, who is our meteorologist, received an award from the National Weather Service for his all night vigil and early warning of the Wenden floods in the fall of 2000. Mr. Ellegood found the program very gratifying because a whole series of agencies pulled together – Wenden is not even in Maricopa County, it's in LaPaz County – and were able to get an early warning out. This was recognized by the District Director of the National Weather Service in San Francisco for which an award was presented at the last Flood Control District All Hands Meeting.

Mr. Ellegood mentioned that he had a meeting that morning with the Office of Management and Budget and it appears there were some minor modifications to the budget that the Advisory Board previously reviewed. Mr. Ellegood learned that morning that the preferred alternative from the Governor, which is the least painful of any of the alternative budgets that have been developed, hits the County with about a \$17 million shortfall, and Mr. Ellegood is certain that this is in revenue sharing. It appears that the County, as a government agency, will receive less in revenue sharing than they have in previous years. He is sure this is true with the cities too. It's a very difficult budget year; in fact, County Budget Manager Sandi Wilson said it's the worst she's seen, worse even than during the financial crisis that the County went through in the early 1990's. Mr. Ellegood thinks that the District's budget is on track and he's looking forward to getting it moved ahead.

The District is currently monitoring eight major bills in the Legislature dealing with: sand and gravel; the split of the County (where the eastern part might want to form a new county); State Land exchanges (which we're not certain is even constitutional, but would certainly open up some opportunities in our dealings with the State Land Department); eminent domain dealing with what the District pays people for their property (will basically increase the cost through public agencies to acquire land under condemnation); flood control districts in the state being subject to audit; building permits; homeland security dealing with the release of plans for public infrastructure; and public records access.

Mr. Ellegood acknowledged Chairman Patel's comments at last month's meeting about his receipt of an award by the Arizona Professional Engineers Association. Mr. Ellegood said he was very gratified and it was quite an honor to receive the award.

7) SUMMARY OF RECENT ACTIONS

Actions of the Board of Supervisors were included in the FCAB packet.

Mr. Ellegood mentioned that the County has a new Board member. Max W. Wilson took over from Jan Brewer who resigned to run for Secretary of State. Mr. Wilson is in the development community and seems very knowledgeable and well informed about issues in his district.

8) OTHER BUSINESS AND COMMENTS FROM THE PUBLIC

There was no other business or comments from the public.

The meeting was adjourned at 3:35 p.m. by general consent.

Shirley Long
Secretary of the Board

Kathy Smith
Clerk of the Board